

FIG. 1

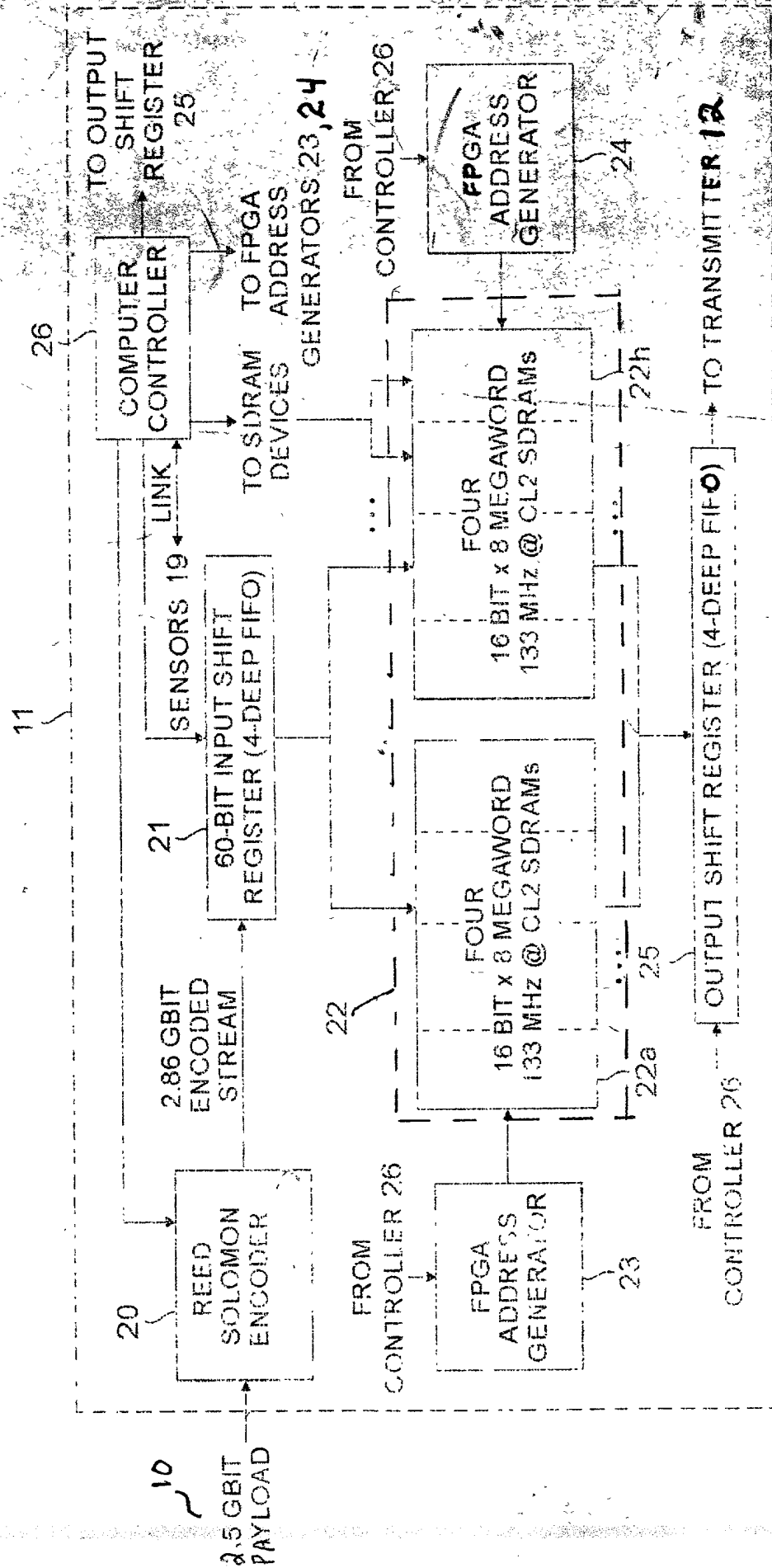
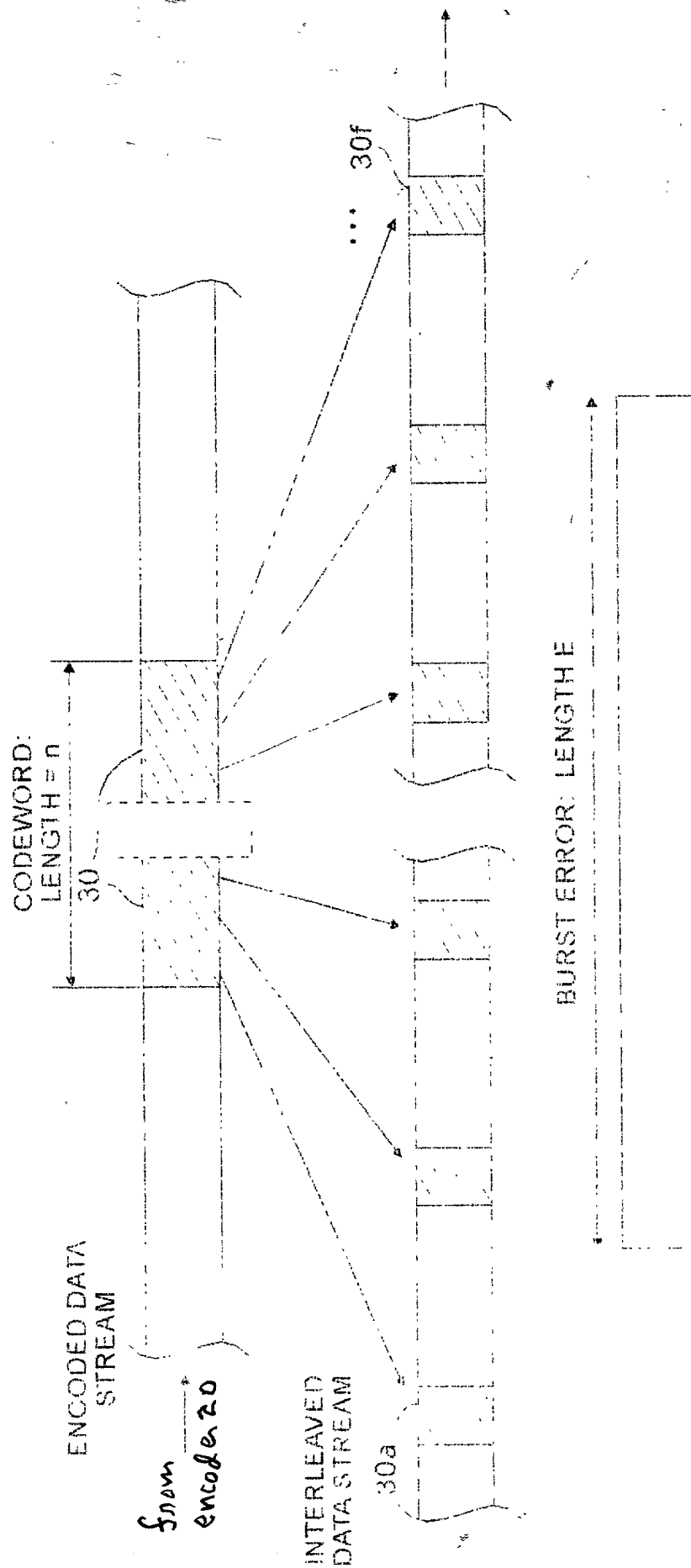


FIG. 2



INTERLEAVING THE ENCODED PAYLOAD

FIG. 3

FROM REED-SOLOMON ENCODER 20

DENOTE THE 60 BIT SEGMENTS OF
THE CODEWORDS BY A 2-TUPLE.

(n, m): n = CODEWORD NUMBER; m = 60-BIT
SEGMENT WITHIN THE CODEWORD
INDICATED

n = 1, 2, ... 156250

m = 1, 2, ... 34 FOR 2040 CODEWORD
LENGTH

INTERLEAVE THE FIRST BLOCK
OF 156,250 CODEWORDS

THEN, AFTER INTERLEAVING THE FIRST BLOCK
OF 156,250 CODEWORDS THE SEQUENCE IS:

[1.1 2.1 3.1 ... 156250.1] [1.2 2.2 156250.2] [1.34 2.34 ... 156250.34]

INTERLEAVE THE SECOND
BLOCK OF 156,250 CODEWORDS

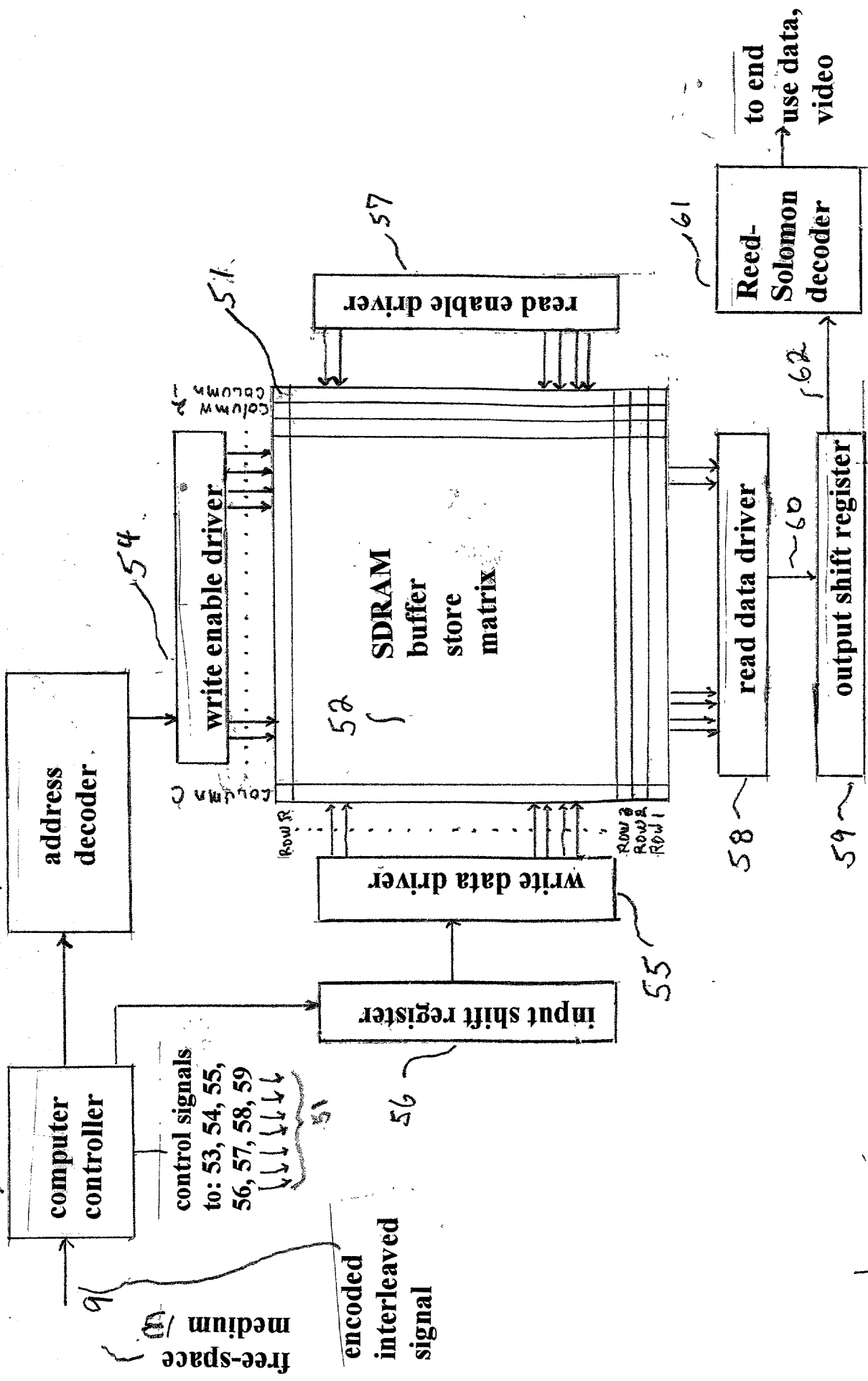
COMPLETE
INTERLEAVING

FIG. 4

549

53 and 54

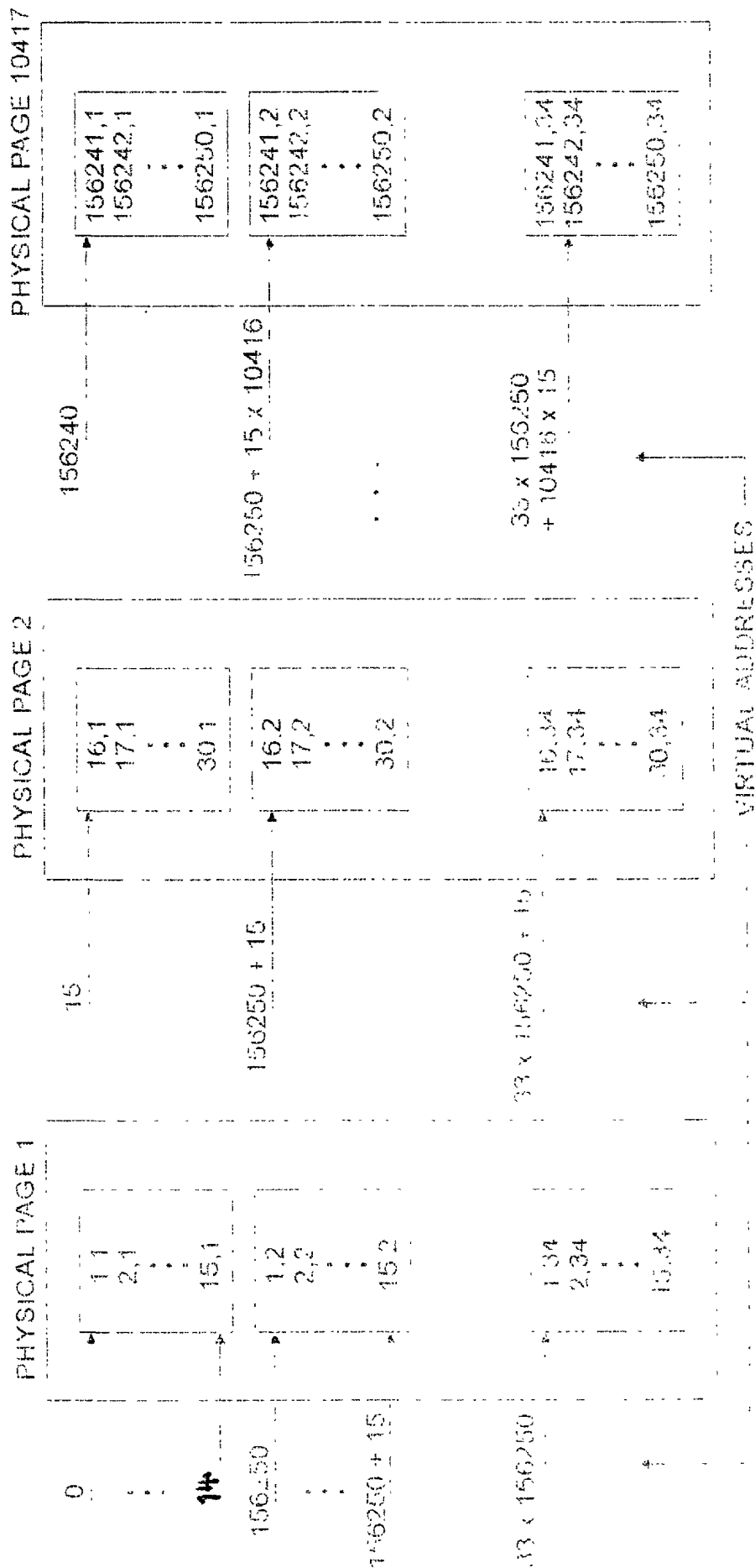
50



signal extractor 15

Fig. 5

(VIRTUAL PAGES ARE 15 WORDS IN LENGTH)



REMAINING ADDRESSES TO BALANCE
'READ' VS 'WRITE' OVERHEAD IN TERMS
OF SDRAM PAGE CHANGES

FIG. 6A

sub-matrix mapping 60-bit entries into first SDRAM page of 512 addresses, using 510 matrix cells to store first codeword during WRITE operation

successive additional (approx. 10,416) sub-matrices mapping further 60-bit entries into SDRAM pages to store second through m^{th} codewords during WRITE operation

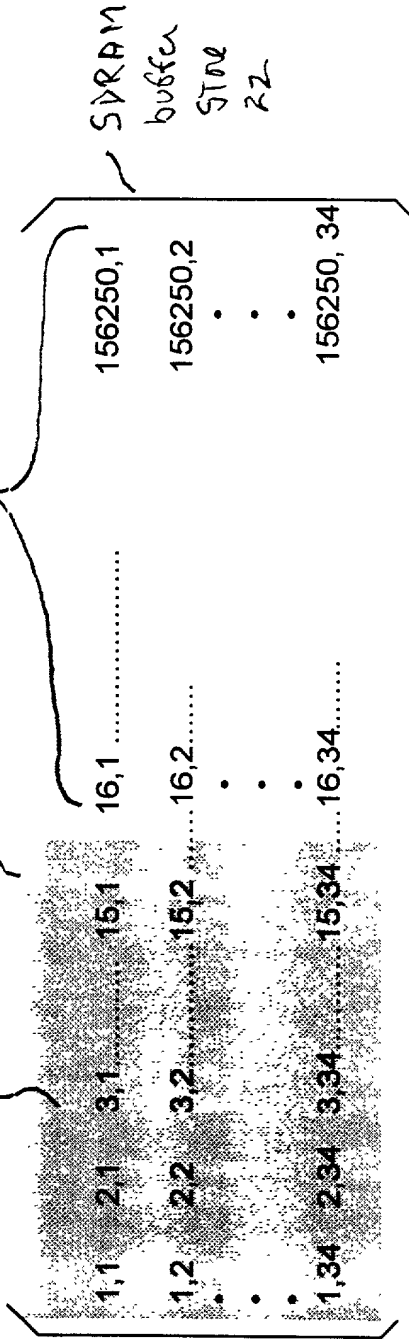


Fig. 6B: Codeword Segments Expressed as a Matrix

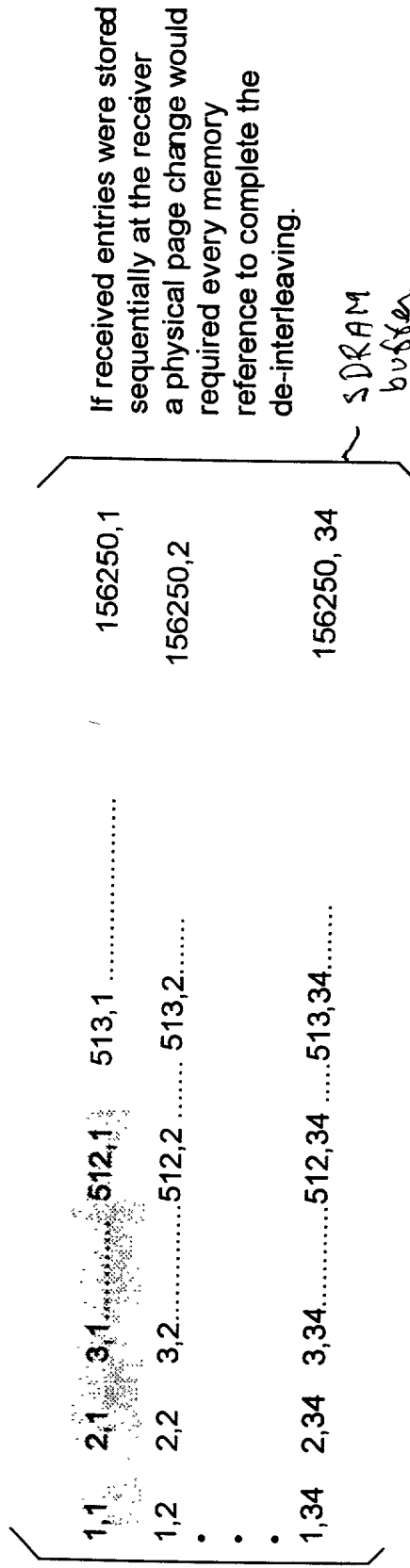


Fig. 6C: Shaded submatrix indicates segment of Received Matrix that Would be Held on One 512 Address page if Receiver Stored Entries Sequentially

Fig. 7A FLOW CHART OF PROCESS AT TRANSMITTER END

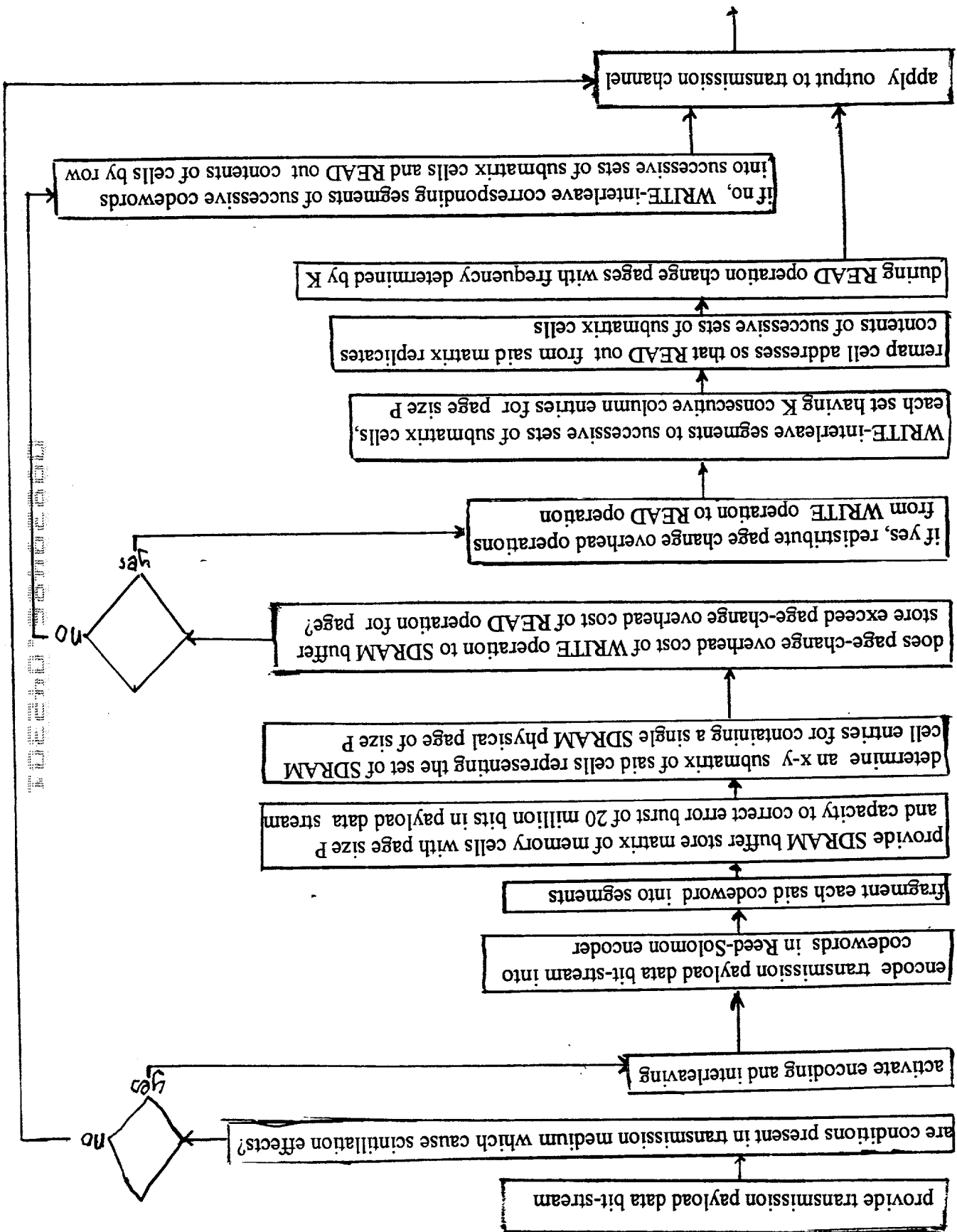


Fig. 7B FLOW CHART OF PROCESS AT RECEIVER END

